



## DEPARTMENT OF THE INTERIOR

### Fish and Wildlife Service

#### 50 CFR Part 17

[Docket No. FWS-R4-ES-2022-0070; FF09E21000 FXES1111090FEDR 223]

RIN 1018-BE86

### Endangered and Threatened Wildlife and Plants; Endangered Species Status for Magnificent Ramshorn and Designation of Critical Habitat

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Proposed rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), propose to list magnificent ramshorn (*Planorbella magnifica*), a freshwater snail species from southeastern North Carolina, as an endangered species and to designate critical habitat for the species under the Endangered Species Act of 1973, as amended (Act). In total, approximately 739 acres (299 hectares) of two ponds in Brunswick County, North Carolina, fall within the boundaries of the proposed critical habitat designation. We also announce the availability of a draft economic analysis (DEA) of the proposed designation of critical habitat for magnificent ramshorn. In addition, this document serves as our 12-month finding on a petition to list magnificent ramshorn. If we finalize this rule as proposed, it would extend the Act's protections to this species and its designated critical habitat.

**DATES:** We will accept comments received or postmarked on or before **[INSERT**

**DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL**

**REGISTER]**. Comments submitted electronically using the Federal eRulemaking Portal (see **ADDRESSES**, below) must be received by 11:59 p.m. eastern time on the closing date. We must receive requests for public hearings, in writing, at the address shown in

**FOR FURTHER INFORMATION CONTACT** by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** *Written comments:* You may submit comments by one of the following methods:

(1) *Electronically:* Go to the Federal eRulemaking Portal:

<https://www.regulations.gov>. In the Search box, enter FWS-R4-ES-2022-0070, which is the docket number for this rulemaking. Then, click on the Search button. On the resulting page, in the panel on the left side of the screen, under the Document Type heading, check the Proposed Rule box to locate this document. You may submit a comment by clicking on “Comment.”

(2) *By hard copy:* Submit by U.S. mail to: Public Comments Processing, Attn: FWS-R4-ES-2022-0070, U.S. Fish and Wildlife Service, MS: PRB/3W, 5275 Leesburg Pike, Falls Church, VA 22041–3803.

We request that you send comments only by the methods described above. We will post all comments on <https://www.regulations.gov>. This generally means that we will post any personal information you provide us (see **Information Requested**, below, for more information).

*Availability of supporting materials:* For the proposed critical habitat designation, the coordinates or plot points or both from which the maps are generated are included in the decision file, are available at <https://www.regulations.gov> under Docket No. FWS-R4-ES-2022-0070, and on the Service’s website at <https://www.fws.gov/office/eastern-north-carolina/library>. Any additional tools or supporting information that we may develop for the critical habitat designation will also be available in the preamble of this proposed rule or at <https://www.regulations.gov>. The species status assessment (SSA) report is also available in the docket at <https://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:** Pete Benjamin, Field Supervisor,

U.S. Fish and Wildlife Service, Raleigh Ecological Services Field Office, P.O. Box 33726, Raleigh, NC 27636-3726; telephone 919–856–4520. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

## **SUPPLEMENTARY INFORMATION:**

### **Executive Summary**

*Why we need to publish a rule.* Under the Act, a species warrants listing if it meets the definition of an endangered species (in danger of extinction throughout all or a significant portion of its range) or a threatened species (likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range). If we determine that a species warrants listing, we must list the species promptly and designate the species' critical habitat to the maximum extent prudent and determinable. We have determined that magnificent ramshorn meets the definition of an endangered species; therefore, we are proposing to list it as such and proposing designation of its critical habitat. Both listing a species as an endangered or threatened species and making a critical habitat determination can be completed only by issuing a rule through the Administrative Procedure Act rulemaking process.

*What this document does.* We propose to list magnificent ramshorn as an endangered species under the Act, and we propose to designate critical habitat for the species.

*The basis for our action.* Under the Act, we may determine that a species is an endangered or threatened species because of any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C)

disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We have determined the species may no longer exist in the wild, as it has not been found in surveys over the past 40 years at the only known historical locations. While likely locally extirpated from the wild, it does persist in captive populations. The most significant stressor that likely led to the extirpation of magnificent ramshorn in the wild is the loss of suitable lentic (still or slow-flowing) habitat (Factor A) that individuals and populations need to complete their life history. The primary causes of historical habitat loss are related to anthropogenic activities coupled with extreme weather events that have altered water quality (Factor E) such that the breeding, feeding, sheltering, and dispersal needs of the snails cannot be met. There are no existing regulatory mechanisms that ameliorate or reduce these threats such that the species does not warrant listing (Factor D).

Section 4(a)(3) of the Act requires the Secretary of the Interior (Secretary) to designate critical habitat concurrent with listing to the maximum extent prudent and determinable. Section 3(5)(A) of the Act defines critical habitat as (i) the specific areas within the geographical area occupied by the species, at the time it is listed, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protections; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination by the Secretary that such areas are essential for the conservation of the species. Section 4(b)(2) of the Act states that the Secretary must make the designation on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impacts of specifying any particular area as critical habitat.

## Information Requested

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from other concerned governmental agencies, Native American Tribes, the scientific community, industry, or any other interested parties concerning this proposed rule.

We particularly seek comments concerning:

(1) The species' biology, range, and population trends, including:

(a) Biological or ecological requirements of the species, including habitat requirements for feeding, breeding, and sheltering;

(b) Genetics and taxonomy;

(c) Historical range, including distribution patterns;

(d) Historical population levels, and current and projected trends; and

(e) Past and ongoing conservation measures for the species, its habitat, or both.

(2) Factors that may affect the continued existence of the species, which may include habitat modification or destruction, overutilization, disease, predation, the inadequacy of existing regulatory mechanisms, or other natural or manmade factors.

(3) Biological, commercial trade, or other relevant data concerning any threats (or lack thereof) to this species and existing regulations that may be addressing those threats.

(4) Additional information concerning the historical and current status, range, distribution, and population size of this species, including the locations of any additional populations of this species.

(5) The reasons why we should or should not designate habitat as "critical habitat" under section 4 of the Act (16 U.S.C. 1531 *et seq.*), including information regarding the following factors that the regulations identify as reasons why designation of critical habitat may be not prudent:

(a) The species is threatened by taking or other human activity and identification of critical habitat can be expected to increase the degree of such threat to the species; or

(b) Such designation of critical habitat would not be beneficial to the species. In determining whether a designation would not be beneficial, the factors the Services may consider include but are not limited to: Whether the present or threatened destruction, modification, or curtailment of a species' habitat or range is not a threat to the species, or whether any areas meet the definition of "critical habitat."

(6) Specific information on:

(a) The amount and distribution of magnificent ramshorn habitat;

(b) Any additional areas occurring within the range of the species (New Hanover and Brunswick Counties in southeastern North Carolina) that should be included in the designation because they (1) are occupied at the time of listing and contain the physical or biological features that are essential to the conservation of the species and that may require special management considerations, or (2) are unoccupied at the time of listing and are essential for the conservation of the species; and

(c) Special management considerations or protection that may be needed in critical habitat areas we are proposing, including managing for the potential effects of climate change.

(7) Land use designations and current or planned activities in the subject areas and their possible impacts on proposed critical habitat.

(8) Any probable economic, national security, or other relevant impacts of designating any area that may be included in the final designation, and the related benefits of including or excluding specific areas.

(9) Information on the extent to which the description of probable economic impacts in the draft economic analysis is a reasonable estimate of the likely economic

impacts and any additional information regarding probable economic impacts that we should consider.

(10) Whether any specific areas we are proposing for critical habitat designation should be considered for exclusion under section 4(b)(2) of the Act, and whether the benefits of potentially excluding any specific area outweigh the benefits of including that area under section 4(b)(2) of the Act. If you think we should exclude any additional areas, please provide information supporting a benefit of exclusion.

(11) Whether we could improve or modify our approach to designating critical habitat in any way to provide for greater public participation and understanding, or to better accommodate public concerns and comments.

Please include sufficient information with your submission (such as scientific journal articles or other publications) to allow us to verify any scientific or commercial information you include.

Please note that submissions merely stating support for, or opposition to, the action under consideration without providing supporting information, although noted, do not provide substantial information necessary to support a determination. Section 4(b)(1)(A) of the Act directs that determinations as to whether any species is an endangered or a threatened species must be made solely on the basis of the best scientific and commercial data available, and section 4(b)(2) of the Act directs that the Secretary shall designate critical habitat on the basis of the best scientific data available.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in **ADDRESSES**. We request that you send comments only by the methods described in **ADDRESSES**.

If you submit information via <https://www.regulations.gov>, your entire submission—including any personal identifying information—will be posted on the website. If your submission is made via a hardcopy that includes personal identifying

information, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so. We will post all hardcopy submissions on <https://www.regulations.gov>.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on <https://www.regulations.gov>.

Because we will consider all comments and information received during the comment period, our final determinations may differ from this proposal. Based on the new information we receive (and any comments on that new information), we may conclude that the species is threatened instead of endangered, or we may conclude that the species does not warrant listing as either an endangered species or a threatened species. For critical habitat, our final designation may not include all areas proposed, may include some additional areas that meet the definition of critical habitat, or may exclude some areas if we find the benefits of exclusion outweigh the benefits of inclusion.

### *Public Hearing*

Section 4(b)(5) of the Act provides for a public hearing on this proposal, if requested. Requests must be received by the date specified in **DATES**. Such requests must be sent to the address shown in **FOR FURTHER INFORMATION CONTACT**. We will schedule a public hearing on this proposal, if requested, and announce the date, time, and place of the hearing, as well as how to obtain reasonable accommodations, in the *Federal Register* and local newspapers at least 15 days before the hearing. We may hold the public hearing in person or virtually via webinar. We will announce any public hearing on the Service's website, in addition to the *Federal Register*. The use of virtual public hearings is consistent with our regulations at 50 CFR 424.16(c)(3).



## Previous Federal Actions

We identified magnificent ramshorn (with the name Cape Fear ramshorn snail, *Helisoma magnificum* (Pilsbry, 1903)) as a Category 2 candidate in our May 22, 1984, notice of review (49 FR 21664). A Category 2 candidate species was one for which there was some evidence of vulnerability, but for which additional biological information was needed to support a proposed rule to list as an endangered or threatened species. The species (as magnificent (=Cape Fear) ramshorn, *Planorbella* (= *Helisoma*) *magnifica*) remained so designated in subsequent candidate notices of review (CNORs) (54 FR 554, January 6, 1989; 56 FR 58804, November 21, 1991; 59 FR 58982, November 15, 1994). In the February 28, 1996, CNOR (61 FR 7596), we discontinued the designation of Category 2 species as candidates; therefore, magnificent ramshorn was no longer a candidate species.

On April 20, 2010, we were petitioned to list 404 aquatic species in the southeastern United States, including magnificent ramshorn. In response to the petition, we completed a partial 90-day finding on September 27, 2011 (76 FR 59836), in which we announced our finding that the petition contained substantial information that listing may be warranted for numerous species, including magnificent ramshorn.

On October 26, 2011, we published the annual CNOR (76 FR 66370) and announced magnificent ramshorn as a new candidate species with a listing priority number (LPN) of 2, indicating that the full species was imminently threatened by a high magnitude of threats. Candidates are those fish, wildlife, and plants for which we have on file sufficient information on biological vulnerability and threats to support preparation of a listing proposal, but for which development of a listing regulation is precluded by other, higher priority listing activities. Magnificent ramshorn was included with an LPN of 2 in all of our subsequent annual CNORs (77 FR 69994, November 21, 2012; 77 FR 70104, November 22, 2013; 79 FR 72450, December 5, 2014; 80 FR 80584, December 24, 2015;

81 FR 87246, December 2, 2016; 84 FR 54732, October 10, 2019; 85 FR 73164, November 16, 2020; 87 FR 26152, May 3, 2022). This document constitutes our 12-month petition finding, proposed listing rule, and proposed critical habitat rule. This document also serves to meet a court-approved settlement agreement with the Center for Biological Diversity to deliver a finding to the *Federal Register* by September 30, 2022 (*Center for Biological Diversity v. FWS*, No. 1:21-cv-00884-EGS (May 4, 2022)).

## **Supporting Documents**

A species status assessment (SSA) team prepared a report for magnificent ramshorn. The SSA team was composed of Service biologists, in consultation with other species experts. The SSA report represents a compilation of the best scientific and commercial data available concerning the status of the species, including the impacts of past, present, and future factors (both negative and beneficial) affecting the species. In accordance with our joint policy on peer review published in the *Federal Register* on July 1, 1994 (59 FR 34270), and our August 22, 2016, memorandum updating and clarifying the role of peer review of listing actions under the Act, we sought the expert opinions of five appropriate specialists regarding the SSA report. We received two responses.

## **I. Proposed Listing Determination**

### **Background**

A thorough review of the taxonomy, life history, and ecology of magnificent ramshorn (*Planorbella magnifica*) is presented in the SSA report (version 1.0; Service 2019, pp. 9–16).

Magnificent ramshorn is a species of air-breathing snail endemic to southeastern North Carolina. It is a freshwater snail in the family Planorbidae (Pilsbry 1903) and is the largest North American snail in this family. It has a discoidal (i.e., coiling in one plane) relatively thin shell that reaches approximately 1.5 inches (38 millimeters) in diameter. The aperture of the shell is somewhat bell-shaped and very wide, extending beyond the

sides of the shell. Like other members of the Planorbidae family, magnificent ramshorn is primarily herbivorous, feeding on emergent and submerged aquatic plants, algae, and detritus (decomposing plant material). Available information indicates that suitable habitat for the species is restricted to relatively shallow, sheltered portions of still or sluggish, freshwater (no salinity) bodies with an abundance and diversity of emergent and submerged aquatic vegetation and a circumneutral (nearly neutral) pH (see table 1, below).

**TABLE 1. Magnificent ramshorn's habitat needs.**

| <b>Waterbody Attribute</b> | <b>Description</b>   |
|----------------------------|--|
| pH                         | Ideal is 6.8 to 7.5; inactive below 6.5 and above 8.   |
| Salinity                   | Ideal is 0 parts per thousand (ppt); 1.0 ppt (1.0 grams per liter (g/L)) caused snails to withdraw.                            |
| Temperature                | 60 °F (16 °C) and above. Still able to feed at 93 °F (34 °C). Dormant below 60 °F.   |
| Hardness*                  | Ideal hardness is:<br>Lab: 30 ppm (30 mg/L);<br>Hatchery ponds: between 60 ppm (60 mg/L) and 220 ppm (200 mg/L).               |
| Emergent vegetation        | Aquatic vegetation in sufficient littoral depth (about 0.5 to 6 feet (ft) (0.15 to 2 meters (m))) used for feeding and shelter |

\* "Hardness" is considered to be the sum of the calcium and magnesium ions in water, expressed as milligrams per liter (mg/L) or parts per million (ppm) as calcium carbonate. It affects snail survival, particularly shell shape.

Historically, magnificent ramshorn was documented from only four sites in the lower Cape Fear River Basin in North Carolina: (1) Greenfield Lake, a millpond located on a tributary to the Cape Fear River within the present city limits of Wilmington, New Hanover County; (2) Orton Pond (also known as Sprunt's Pond), a millpond located on Orton Creek in Brunswick County; (3) Big Pond (also known as Pleasant Oaks Pond or Sand Hill Creek Pond), a millpond on Sand Hill Creek in Brunswick County; and (4) McKinzie Pond, a millpond on McKinzie Creek, in Brunswick County. Species-specific surveys of more than 100 potential sites (including most historical locations) over the last

few decades have not documented any magnificent ramshorn snails, and the species is currently likely extirpated in the wild.

## **Regulatory and Analytical Framework**

### *Regulatory Framework*

Section 4 of the Act (16 U.S.C. 1533) and its implementing regulations (50 CFR part 424) set forth the procedures for determining whether a species is an endangered species or a threatened species. On July 5, 2022, the U.S. District Court for the Northern District of California vacated regulations that the Service (jointly with the National Marine Fisheries Service) had promulgated in 2019 (*Center for Biological Diversity v. Haaland*, No. 4:19-cv-05206-JST, Doc. 168 (*CBD v. Haaland*)). As a result of that vacatur, regulations that were in effect before those 2019 regulations now govern listing and critical habitat decisions. Our analysis for this decision applied those pre-2019 regulations. However, given that litigation remains regarding the court's vacatur of those 2019 regulations, we also undertook an analysis of whether the decision would be different if we were to apply the 2019 regulations. We concluded that the decision would have been the same if we had applied the 2019 regulations. The analysis based on the 2019 regulations is included in the record for this decision.

The Act defines an “endangered species” as a species that is in danger of extinction throughout all or a significant portion of its range, and a “threatened species” as a species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The Act requires that we determine whether any species is an endangered species or a threatened species because of any of the following factors:

(A) The present or threatened destruction, modification, or curtailment of its habitat or range;

(B) Overutilization for commercial, recreational, scientific, or educational purposes;

(C) Disease or predation;

(D) The inadequacy of existing regulatory mechanisms; or

(E) Other natural or manmade factors affecting its continued existence.

These factors represent broad categories of natural or human-caused actions or conditions that could have an effect on a species' continued existence. In evaluating these actions and conditions, we look for those that may have a negative effect on individuals of the species, as well as other actions or conditions that may ameliorate any negative effects or may have positive effects.

We use the term “threat” to refer in general to actions or conditions that are known to or are reasonably likely to negatively affect individuals of a species. The term “threat” includes actions or conditions that have a direct impact on individuals (direct impacts), as well as those that affect individuals through alteration of their habitat or required resources (stressors). The term “threat” may encompass—either together or separately—the source of the action or condition or the action or condition itself.

However, the mere identification of any threat(s) does not necessarily mean that the species meets the statutory definition of an “endangered species” or a “threatened species.” In determining whether a species meets either definition, we must evaluate all identified threats by considering the expected response by the species, and the effects of the threats—in light of those actions and conditions that will ameliorate the threats—on an individual, population, and species level. We evaluate each threat and its expected effects on the species, then analyze the cumulative effect of all of the threats on the species as a whole. We also consider the cumulative effect of the threats in light of those actions and conditions that will have positive effects on the species—such as any existing regulatory mechanisms or conservation efforts. The Secretary determines whether the

species meets the definition of an “endangered species” or a “threatened species” only after conducting this cumulative analysis and describing the expected effect on the species now and in the foreseeable future.

The Act does not define the term “foreseeable future,” which appears in the statutory definition of “threatened species.” Because the decision in *CBD v. Haaland* vacated our 2019 regulations regarding the foreseeable future, we refer to a 2009 Department of the Interior Solicitor’s opinion entitled “The Meaning of ‘Foreseeable Future’ in Section 3(20) of the Endangered Species Act” (M-37021). That Solicitor’s opinion states that the foreseeable future “must be rooted in the best available data that allow predictions into the future” and extends as those predictions are “sufficiently reliable to provide a reasonable degree of confidence in the prediction, in light of the conservation purposes of the Act.” *Id.* at 13.

It is not always possible or necessary to define the foreseeable future as a particular number of years. Analysis of the foreseeable future uses the best scientific and commercial data available and should consider the timeframes applicable to the relevant threats and to the species’ likely responses to those threats in view of its life-history characteristics. Data that are typically relevant to assessing the species’ biological response include species-specific factors such as lifespan, reproductive rates or productivity, certain behaviors, and other demographic factors.

#### *Analytical Framework*

The SSA report documents the results of our comprehensive biological review of the best scientific and commercial data regarding the status of the species, including an assessment of the potential threats to the species. The SSA report does not represent a decision by the Service on whether the species should be proposed for listing as an endangered or threatened species under the Act. However, it does provide the scientific basis that informs our regulatory decisions, which involve the further application of

standards within the Act and its implementing regulations and policies. The following is a summary of the key results and conclusions from the SSA report; the full SSA report can be found at Docket No. FWS-R4-ES-2022-0070 on <https://www.regulations.gov>.

To assess magnificent ramshorn's viability, we used the three conservation biology principles of resiliency, redundancy, and representation (Shaffer and Stein 2000, pp. 306–310). Briefly, resiliency supports the ability of the species to withstand environmental and demographic stochasticity (for example, wet or dry, warm or cold years), redundancy supports the ability of the species to withstand catastrophic events (for example, droughts, large pollution events), and representation supports the ability of the species to adapt over time to long-term changes in the environment (for example, climate changes). In general, the more resilient and redundant a species is and the more representation it has, the more likely it is to sustain populations over time, even under changing environmental conditions. Using these principles, we identified the species' ecological requirements for survival and reproduction at the individual, population, and species levels, and described the beneficial and risk factors influencing the species' viability.

The SSA process can be categorized into three sequential stages. During the first stage, we evaluated individual species' life-history needs. The next stage involved an assessment of the historical and current condition of the species' demographics and habitat characteristics, including an explanation of how the species arrived at its current condition. The final stage of the SSA involved making predictions about the species' responses to positive and negative environmental and anthropogenic influences. Throughout all of these stages, we used the best available information to characterize viability as the ability of a species to sustain populations in the wild over time. We use this information to inform our regulatory decision.

## Summary of Biological Status and Threats

In this discussion, we review the biological condition of the species and its resources, and the threats that influence the species' current and future condition, in order to assess the species' overall viability and the risks to that viability. Although magnificent ramshorn is considered a large snail, its shell is thin and fragile, indicating that it is adapted to lentic (still or slow-flowing) aquatic habitats. Available information indicates that suitable habitat for the species is restricted to relatively shallow, sheltered portions of still or sluggish, freshwater bodies with an abundance and diversity of emergent and submerged aquatic vegetation and a circumneutral pH (pH within the range of 6 to 8) (Jones 2020, pers. comm.). The species is not able to survive in flowing water, nor is it able to tolerate any amount of salinity, thus restricting it to inland, freshwater, pond-like habitats.

### *Loss of Lentic (Pond) Habitats*

Although the complete historical range of magnificent ramshorn is unknown, available information indicates that the species was likely once an inhabitant of beaver ponds on tributaries in the lower Cape Fear River basin; the species may also have once inhabited backwater and other sluggish portions of tributaries and the main channel of lower Cape Fear River. Beaver pond habitat was eliminated throughout much of the lower Cape Fear River as a result of the extirpation of the beaver due to trapping and hunting during the 19th and early 20th centuries. This, together with draining and destruction of beaver ponds for development, agriculture, and other purposes, is believed to have led to a significant decline in the snails' habitat and significant reduction in its abundance (Wood 2010, pp. 6, 7). Surveys in the 1990s also noted the loss of ponds due to hurricanes (Adams 1993, p. 26). Several ponds that were created or maintained by old mill dams have structures that will fail, or have failed, during catastrophic events. Catastrophic rainfall can overtop old mill dam structures and cause portions of them to



wash out, thus draining the ponds behind them. This is likely what happened at McKinzie Pond. The four known historical sites where magnificent ramshorn were found are, or were, ponds likely created by old mill dams.

### *Saltwater Intrusion*

Dredging and deepening of the Cape Fear River channel, which began as early as 1822, and opening of the Atlantic Intracoastal Waterway (through Snow's Cut) in 1930 for navigational purposes have caused saltwater intrusion, altered the diversity and abundance of aquatic vegetation, and changed flows and current patterns far up the river channel and its lower tributaries (Adams 1993, p. 22; Wood 2010, p. 7). Under these circumstances, magnificent ramshorn could have survived only in lentic areas of tributary streams not affected by saltwater intrusion and other changes, such as the millponds protected from saltwater intrusion by their dams (Adams 1993, p. 22).

Climate change and sea level rise pose a significant long-term threat to the survival of magnificent ramshorn. As previously noted, magnificent ramshorn is salt-intolerant (Wood 2002, p. 3), and saltwater intrusion into its habitat is one of the primary factors that contributed to its extirpation in the wild. In general during the past century, sea level has risen by 8+ inches (20+ centimeters (cm)), and available information indicates the rate of sea level rise is increasing (U.S. Global Change Research Program (USGCRP) 2009, p. 18; Kopp et al. 2015, p. 700). Sea levels are rising at a rate of about an inch (2.5 cm) per year (5 inches (12.7 cm) from 2011–2015) in some areas along the east coast of North Carolina (Valle-Levinson et al. 2017, p. 7876). While future rates of sea level change are uncertain, continued sea level rise threatens the southeastern U.S. coastal zone with retreat of shorelines, inundation of coastal wetlands and streams, and increased salinity of estuaries, coastal wetlands, and tidal rivers and creeks, pushing freshwater coastal ecosystems farther inland. In addition, in the future, the southeastern United States faces potential higher average temperatures (resulting in increased

evaporation rates), less frequent rainfall (resulting in potentially more frequent and longer dry periods), and an increase in intensity of storm events, including hurricanes; all of which are likely to increase the rate and upstream distance of saltwater intrusion into coastal streams. Also, higher average temperatures and longer periods between rainfall events, together with increased development and human population levels in Brunswick and New Hanover Counties, will result in an increased demand on freshwater systems for drinking, irrigation, and other water needs, exacerbating the effects of sea level changes on streams in the lower Cape Fear River basin, which encompass the entire known historical range of magnificent ramshorn (adapted from USGCRP and references therein 2009, pp. 1111–1116).

#### *Disrupted Nutrient Cycles—Pollution and Nutrient Inputs*

The human residential population of Brunswick and New Hanover Counties is rapidly increasing; both counties are popular vacationing and retirement areas (see section 5-6 of the SSA report (Service 2019, pp. 31–35)). Both counties are among the most rapidly developing counties in the State, with population growth greater than 25 percent during the period of 2000–2010 (WRAL 2019, unpaginated). Typically, as development increases, the input of nutrients (through both surface and groundwater), silt, and other pollutants into the aquatic system increases. Increased input of these pollutants into the stream from point and non-point sources may result in eutrophication, decreased dissolved oxygen concentration, increased acidity and conductivity, and other changes in water chemistry. Impacts from development within the areas that formerly harbored magnificent ramshorn or within areas that may provide potential habitat for the species, have the potential to reduce groundwater levels, which could have a serious adverse effect on pH, water hardness, and salinity levels.

#### *Altered Aquatic Vegetation Communities*

Aquatic vegetation is common in pond systems, but sometimes the vegetation can be invasive and overwhelm the aquatic system, such as in Greenfield Lake, formerly occupied snail habitat in Wilmington. Managing vegetation in ponds takes many forms; some practices are compatible with molluscan pond inhabitants (like magnificent ramshorn), such as aeration or mechanical cutting/removal, but some practices can significantly impact snails, such as using grass carp, using copper-based herbicides, or drawing water out of the pond and subsequently drying out vegetation for complete removal, as was once done in Big Pond, formerly occupied by the ramshorn. The latter practices result in snail mortality, either from complete elimination of aquatic vegetation on which the snails depend, exposure to toxic metals like copper, lethal temperatures, predation, or desiccation from no access to water (Adams 1993, p. 12).

#### *Extreme Weather Events*

Changes in climate and weather patterns may affect ecosystem processes and communities by altering the abiotic conditions experienced by biotic assemblages, resulting in potential effects on community composition and individual species interactions (DeWan et al. 2010, p. 7). This is especially true for aquatic systems where increases in droughts or severe storm events resulting from climate change can trigger a cascade of ecological effects. For example, increases in air temperatures can lead to subsequent increases in water temperatures that, in turn, may lower water quality parameters (like pH), ultimately influencing overall habitat suitability for species like magnificent ramshorn.

Impacts from climate change affect sea levels; alter precipitation patterns and subsequent delivery of freshwater, nutrients, and sediment; and change the frequency and intensity of coastal storms (Michener et al. 1997, p. 770; Scavia et al. 2002, p. 149; Neumann et al. 2015, p. 97). During the time when magnificent ramshorn became extremely rare in the wild (1990s–2000s), three of the top five strongest/most intense

storms experienced in Wilmington, North Carolina, occurred (1996, 1998, and 1999) and caused massive flooding and saltwater intrusion into the ponds where magnificent ramshorn occurred (Service 2019, p. 24).

The North Carolina Wildlife Action Plan (NCWRC 2015, pp. 5–48) identifies climate change as a “very high” threat to magnificent ramshorn. In addition, in an assessment of ecosystem response to climate change, factors associated with climate change ranked high with other factors that were deemed imminent risks to magnificent ramshorn’s historical population locations (e.g., development, pollution, flood regime alteration, etc.; NCNHP 2010, entire). Furthermore, it should be recognized that the greatest threat from climate change to magnificent ramshorn habitat may come from synergistic effects. That is, factors associated with a changing climate may act as risk multipliers by increasing the risk and severity of more imminent threats (Arabshahi and Raines 2012, p. 8). As a result, impacts from rapid urbanization in the region might be exacerbated under even a mild-to-moderate climate future.

### *Regulatory Mechanisms*

Magnificent ramshorn is currently listed by the State of North Carolina as an endangered species. However, this designation does not protect the species from “incidental” harm, injury, or death (that is, harm, injury, or death resulting from activities not specifically intended to harm the species) or provide any protection to the species’ habitat except on State-owned lands.

### *Conservation Efforts*

Captive holding of magnificent ramshorn began in the early 1990s, when individuals were collected to learn about their life-history requirements (Adams 1993, entire). In the mid-1990s, snails were held in captivity at the North Carolina Aquarium at Fort Fisher but were later moved to a private residence due to the influence of salt-laden

air at the aquarium. There is a well-maintained snail sanctuary at the private residence, kept since the mid-1990s with approximately 100 breeding ramshorn snails.

In early 2012, a small (35 individuals) captive population was established at North Carolina State University's College of Veterinary Medicine's (CVM) Aquatic Epidemiology Conservation Laboratory in Raleigh, North Carolina. These captive snails have reproduced successfully and there are currently approximately 100 snails at the facility (which has had to scale back operations temporarily due to Covid-19 restrictions).

Additional facilities for holding and propagating magnificent ramshorn at the NCWRC's hatchery in Watha, North Carolina, were established in 2011. In 2018, NCWRC hired a snail technician to focus on magnificent ramshorn husbandry at the Watha hatchery. The NCWRC subsequently moved the snail technician and all snails to their Conservation Aquaculture Center in Marion, North Carolina; there are currently approximately 775 breeding snails at this location.

In 2012–2013, several potentially suitable locations, including portions of Orton Pond, McKinzie Pond, Big Pond (Sand Hill Creek/Pleasant Oaks Pond), and nearby Pretty Pond, were all brought under single ownership. In 2014, the landowner approached the Service to determine the possibility of restoring the snail to Big Pond at the Pleasant Oaks Plantation. A proposal to assess snail restoration potential under a candidate conservation agreement with assurances (CCAA) has been formulated but not finalized or implemented.

The North Carolina Division of Water Resources and the Service are working with the city of Wilmington, North Carolina, to improve the water quality of Greenfield Lake, which formerly supported the species. Greenfield Lake is currently on the State's list of impaired water bodies due to excessive nutrient inputs.

In 2018, Service staff performed an analysis to determine the suitability of potential habitats within the former range to support introduction of magnificent

ramshorn. The results are being used by staff to field-verify the suitability of potential locations. In preparation for potential reintroduction, the Service has drafted experimental protocols to detail necessary steps for possible introduction of the species into the wild. Further, the Service is drafting a CCAA for landowners interested in contributing to the conservation of the State's aquatic species; this agreement would broadly cover aquatic species and is in addition to the draft CCAA with the owner of three ponds in the species' historical range.

In 2019 and 2020, Service staff met with Department of Defense (DoD) and the North Carolina Plant Conservation Program (NCPCP), both landowners with several ponds on their properties within the historical range of magnificent ramshorn. The DoD's Military Ocean Terminal Sunny Point is immediately adjacent to the private property where the species was last known to occur in the wild. The NCPCP and DoD own ponds in the same watershed as the historical locations. Both are amenable to having water quality analyzed to determine whether their ponds could be suitable habitat for snail introduction, and that habitat assessment work began in 2021, under the lead of NCWRC.

Further, in a 2019 legal settlement involving a major highway project, NCDOT committed \$250,000 for magnificent ramshorn propagation into the future while we work on reintroduction site assessment and landowner agreements.

### *Summary*

Based on the results of repeated surveys from the 1980s to 2010s by qualified species experts in the species' historical habitat and suitable habitat in surrounding areas, there appear to be no extant populations of magnificent ramshorn in the wild. While several factors have likely contributed to the extirpation of magnificent ramshorn in the wild, the primary factors include loss of lentic habitats, perhaps associated with the extirpation of beavers (and their impoundments) between the early and late 20th century; increased salinity and alteration of flow patterns in the lower Cape Fear River Basin; and

increased input of nutrients and other pollutants that may have altered the pH of pond waters beyond what the species can tolerate.

The extirpation of magnificent ramshorn from Greenfield Lake is likely attributable to the alteration of the lake's water quality and chemistry resulting from past events such as breaks in sewer lines on the bottom of the lake; sewage overflows during storm events; runoff of fertilizers, sediment, toxic chemicals, and other pollutants from heavy development in the watershed; and efforts by the city of Wilmington to control aquatic plants and algae within the lake. All of these changes to Greenfield Lake likely led to salinization of the waters to levels beyond what the species could tolerate. Additionally, application of herbicides (usually containing copper) to control aquatic plants would not only have eliminated the snail's food source but could have directly killed individual snails.

The Big Pond population of magnificent ramshorn was likely extirpated in 1996, when the dam on the pond was breached during flooding associated with Hurricane Fran. This resulted in the subsequent drawdown of the pond due to failure of the dam, and saltwater intrusion into the pond from upstream movement of the saltwater wedge in the Cape Fear River, which killed the aquatic vegetation and eliminated the salt-intolerant magnificent ramshorn.

Magnificent ramshorn was last observed in McKenzie Pond in 2004, but was likely extirpated due to saltwater intrusion resulting from prolonged drought conditions that allowed tidal flow of saltwater to extend into the areas harboring the snail.

Magnificent ramshorn may have been eliminated from Orton Pond by the landowner's multiple past attempts to control aquatic vegetation by drawing down the pond for extended periods of time, thus eliminating essential habitat components of water and vegetation, causing snail extirpation.

The ongoing anthropogenic activities described above, coupled with the effects of climate change, such as extreme weather events (e.g., storms/hurricanes) that may blow out dams and cause saltwater intrusion, have the potential to continue to alter habitat and water quality such that the breeding, feeding, sheltering, and dispersal needs of magnificent ramshorn cannot be met.

While efforts have been made to restore habitat for magnificent ramshorn at one of the sites known to have previously supported the species, all of the sites continue to be affected by many of the same factors (i.e., saltwater intrusion and other water quality degradation, nuisance aquatic plant control, storms, sea level rise, etc.) thought to have resulted in extirpation of the species from the wild. Currently, only three captive populations exist, with approximately 1,000 snails in existence. Although captive populations have been maintained since 1993, a catastrophic event, such as a severe storm, disease, or predator infestation, affecting one or more of the captive populations, could result in the near extinction of the species.

Magnificent ramshorn lacks the resiliency, redundancy, and representation necessary for viability. Magnificent ramshorn populations were not able to survive habitat degradation resulting from impacts including saltwater intrusion, pollutant influx, and human alteration of aquatic vegetation communities, thus eliminating the species' resiliency. Based on knowledge of the snail and the systems it depends on, the loss of habitat, and the lack of finding any magnificent ramshorns despite surveying dozens of possible locations, magnificent ramshorn has no redundancy in the wild. Furthermore, the historical range of the species is narrow and limited to lentic habitats within the Coastal Plain of southeastern North Carolina. We do not know the level of genetic diversity of the captive animals; however, we do know that the individuals in captivity are all descendants of adult snails from two distinct populations: Pleasant Oaks Pond and McKinzie Pond. The captive ramshorns have extremely limited representation, and since



no magnificent ramshorns are known to exist in the wild, the species has no representation in the wild. We cannot project future conditions because there are no known extant populations on which we can project those conditions. While magnificent ramshorn is likely extirpated from the wild, recovering the species means re-establishing self-sustaining populations in the wild.

We note that, by using the SSA framework to guide our analysis of the scientific information documented in the SSA report, we have not only analyzed individual effects on the species, but we have also analyzed their potential cumulative effects. The primary causes of historical habitat loss within the range of the magnificent ramshorn are related to anthropogenic activities coupled with extreme weather events that have altered water quality such that the breeding, feeding, sheltering, and dispersal needs of the snails cannot be met. We incorporate the cumulative effects into our SSA analysis when we characterize the current and future condition of the species. To assess the condition of the species, we undertake an iterative analysis that encompasses and incorporates the threats individually and then accumulates and evaluates the effects of all the factors that may be negatively or positively influencing the species, including threats and conservation efforts. Because the SSA framework considers not just the presence of the factors, but to what degree they collectively influence risk to the entire species, our assessment integrates the cumulative effects of the factors and replaces a standalone cumulative effects analysis.

### **Determination of Magnificent Ramshorn's Status**

Section 4 of the Act (16 U.S.C. 1533) and its implementing regulations (50 CFR part 424) set forth the procedures for determining whether a species meets the definition of endangered species or threatened species. The Act defines an “endangered species” as a species that is in danger of extinction throughout all or a significant portion of its range, and a “threatened species” as a species that is likely to become an endangered species

within the foreseeable future throughout all or a significant portion of its range. The Act requires that we determine whether a species meets the definition of an endangered species or a threatened species because of any of the following factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence.

We have determined that magnificent ramshorn is likely extirpated in the wild. The most significant stressor that likely led to the extirpation of magnificent ramshorn in the wild is the loss of suitable lentic (still or slow-flowing) habitat that individuals and populations need to complete their life history (Factor A). The primary causes of historical habitat loss are related to anthropogenic activities that removed aquatic vegetation, coupled with extreme weather events (e.g., hurricanes that breach dams) that have altered water quality via saltwater intrusion (Factor E) such that the breeding, feeding, sheltering, and dispersal needs of the snails cannot be met. Existing regulatory mechanisms that would ameliorate or reduce these threats are not adequate (Factor D).

#### *Status Throughout All of Its Range*

After evaluating threats to the species and assessing the cumulative effect of the threats under the Act's section 4(a)(1) factors, magnificent ramshorn lacks the three factors for viability. Based on the findings of decades of surveys to locate the species, magnificent ramshorn is likely extirpated in the wild. The past loss of suitable pond habitat and the challenge of finding suitable introduction sites exacerbates the current situation for magnificent ramshorn. The only known surviving individuals of the species are being held as part of captive populations. Although captive populations have been maintained since 1993, a catastrophic event, such as a severe storm, disease, or predator infestation, affecting one or more of the captive populations, could result in the near

extinction of the species. Thus, after assessing the best available information, we conclude that magnificent ramshorn is in danger of extinction throughout all of its range.

#### *Status Throughout a Significant Portion of Its Range*

Under the Act and our implementing regulations, a species may warrant listing if it is in danger of extinction or likely to become so in the foreseeable future throughout all or a significant portion of its range. We have determined that magnificent ramshorn is in danger of extinction throughout all of its range and accordingly did not undertake an analysis of any significant portion of its range. Because magnificent ramshorn warrants listing as endangered throughout all of its range, our determination does not conflict with the decision in *Center for Biological Diversity v. Everson*, 435 F. Supp. 3d 69 (D.D.C. 2020) (*Everson*), because that decision related to significant portion of the range analyses for species that warrant listing as threatened, not endangered, throughout all of their range.

#### *Determination of Status*

Our review of the best scientific and commercial data available indicates that magnificent ramshorn meets the Act's definition of an endangered species. Therefore, we propose to list magnificent ramshorn as an endangered species in accordance with sections 3(6) and 4(a)(1) of the Act.

#### **Available Conservation Measures**

Conservation measures provided to species listed as endangered or threatened species under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing results in public awareness, and conservation by Federal, State, Tribal, and local agencies, private organizations, and individuals. The Act encourages cooperation with the States and other countries and calls for recovery actions to be carried out for listed species. The

protection required by Federal agencies and the prohibitions against certain activities are discussed, in part, below.

The primary purpose of the Act is the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation efforts is the recovery of these listed species, so that they no longer need the protective measures of the Act. Subsection 4(f) of the Act calls for the Service to develop and implement recovery plans for the conservation of endangered and threatened species. The goal of this process is to restore listed species to a point where they are secure, self-sustaining, and functioning components of their ecosystems.

The recovery planning process begins with development of a recovery outline made available to the public soon after a final listing determination. The recovery outline guides the immediate implementation of urgent recovery actions while a recovery plan is being developed. Recovery teams (composed of species experts, Federal and State agencies, nongovernmental organizations, and stakeholders) may be established to develop and implement recovery plans. The recovery planning process involves the identification of actions that are necessary to halt and reverse the species' decline by addressing the threats to its survival and recovery. The recovery plan identifies recovery criteria for review of when a species may be ready for reclassification from endangered to threatened ("downlisting") or removal from protected status ("delisting"), and methods for monitoring recovery progress. Recovery plans also establish a framework for agencies to coordinate their recovery efforts and provide estimates of the cost of implementing recovery tasks. Revisions of the plan may be done to address continuing or new threats to the species, as new substantive information becomes available. The recovery outline, draft recovery plan, final recovery plan, and any revisions will be available on our website as they are completed (<https://www.fws.gov/program/endangered-species>), or

from our Raleigh Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Implementation of recovery actions generally requires the participation of a broad range of partners, including other Federal agencies, States, Tribes, nongovernmental organizations, businesses, and private landowners. Examples of recovery actions include habitat restoration (e.g., restoration of native vegetation), research, captive propagation and reintroduction, and outreach and education. The recovery of many listed species cannot be accomplished solely on Federal lands because their range may occur primarily or solely on non-Federal lands. To achieve recovery of these species requires cooperative conservation efforts on private, State, and Tribal lands.

If this species is listed, funding for recovery actions will be available from a variety of sources, including Federal budgets, State programs, and cost share grants for non-Federal landowners, the academic community, and nongovernmental organizations. In addition, pursuant to section 6 of the Act, the State of North Carolina would be eligible for Federal funds to implement management actions that promote the protection or recovery of magnificent ramshorn. Information on our grant programs that are available to aid species recovery can be found at: <https://www.fws.gov/service/financial-assistance>.

Although magnificent ramshorn is only proposed for listing under the Act at this time, please let us know if you are interested in participating in recovery efforts for this species. Additionally, we invite you to submit any new information on this species whenever it becomes available and any information you may have for recovery planning purposes (see **FOR FURTHER INFORMATION CONTACT**).

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as an endangered or threatened species and with respect to its critical habitat. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the

Act requires Federal agencies to confer with the Service on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with the Service.

Federal agency actions within the species' habitat that may require conference or consultation or both as described in the preceding paragraph include issuance of permits under section 404 of the Clean Water Act (33 U.S.C. 1251 et seq.) by the U.S. Army Corps of Engineers, and construction and maintenance of roads or highways by the Federal Highway Administration.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to endangered wildlife. The prohibitions of section 9(a)(1) of the Act, codified at 50 CFR 17.21, make it illegal for any person subject to the jurisdiction of the United States to take (which includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these) endangered wildlife within the United States or on the high seas. In addition, it is unlawful to import; export; deliver, receive, carry, transport, or ship in interstate or foreign commerce in the course of commercial activity; or sell or offer for sale in interstate or foreign commerce any species listed as an endangered species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to employees of the Service, the National Marine Fisheries Service, other Federal land management agencies, and State conservation agencies.

We may issue permits to carry out otherwise prohibited activities involving endangered wildlife under certain circumstances. Regulations governing permits are codified at 50 CFR 17.22. With regard to endangered wildlife, a permit may be issued for the following purposes: For scientific purposes, to enhance the propagation or survival of the species, and for incidental take in connection with otherwise lawful activities. The statute also contains certain exemptions from the prohibitions, which are found in sections 9 and 10 of the Act.

It is our policy, as published in the *Federal Register* on July 1, 1994 (59 FR 34272), to identify to the maximum extent practicable at the time a species is listed, those activities that would or would not constitute a violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effect of a proposed listing on proposed and ongoing activities within the range of the species proposed for listing. Based on the best available information, normal rice cultivation impoundment water level management practices that are carried out in accordance with any existing regulations, permit requirements, and best management practices are unlikely to result in a violation of section 9.

Based on the best available information, the following activities may potentially result in a violation of section 9 of the Act if they are not authorized in accordance with applicable law; this list is not comprehensive:

- (1) Unauthorized handling or collecting of the species;
- (2) Destruction or alteration of the species' habitat by draining, ditching, tiling, or diverting or altering surface or ground water flow into or out of ponds or other slack water areas;
- (3) Herbicide or other pesticide applications in violation of label restrictions in areas occupied by magnificent ramshorn;

(4) Introduction of nonnative species that compete with or prey upon magnificent ramshorn;

(5) Removal or destruction of emergent aquatic vegetation in areas designated as critical habitat or in any body of water in which magnificent ramshorn becomes established; and

(6) Discharge of chemicals into any waters in which magnificent ramshorn becomes established.

Questions regarding whether specific activities would constitute a violation of section 9 of the Act should be directed to the Raleigh Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

## **II. Critical Habitat**

### **Background**

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features

(a) Essential to the conservation of the species, and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Our regulations at 50 CFR 424.02 define the geographical area occupied by the species as an area that may generally be delineated around species' occurrences, as determined by the Secretary (i.e., range). Such areas may include those areas used throughout all or part of the species' life cycle, even if not used on a regular basis (e.g., migratory corridors, seasonal habitats, and habitats used periodically, but not solely by



vagrant individuals). Additionally, although on June 24, 2022, we published a final rule rescinding the 2019 regulations at 50 CFR 424.02 defining the word “habitat” (87 FR 37757), we have determined that, even if we had to apply definition in the 2019 regulations, this proposed critical habitat designation would meet this definition.

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation also does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the Federal agency would be required to consult with the Service under section 7(a)(2) of the Act. However, even if the Service were to conclude that the proposed activity would result in destruction or adverse modification of the critical habitat, the Federal action agency and the landowner are not required to abandon the proposed

activity, or to restore or recover the species; instead, they must implement “reasonable and prudent alternatives” to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act’s definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat).

Under the second prong of the Act’s definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. We note that the court in *CBD v. Haaland* vacated the provisions from the 2019 regulations regarding unoccupied critical habitat. Therefore, the regulations that now govern designations of critical habitat are the implementing regulations that were in effect before the 2019 regulations.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the *Federal Register* on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658)), and our associated Information Quality Guidelines provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the

use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information from the SSA report and information developed during the listing process for the species. Additional information sources may include any generalized conservation strategy, criteria, or outline that may have been developed for the species; the recovery plan for the species; articles in peer-reviewed journals; conservation plans developed by States and counties; scientific status surveys and studies; biological assessments; other unpublished materials; or experts' opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act; (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species; and (3) the prohibitions found in section 9 of the Act. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of the species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans,

habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of those planning efforts calls for a different outcome.

### **Prudency Determination**

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR 424.12), require that, to the maximum extent prudent and determinable, the Secretary shall designate critical habitat at the time the species is determined to be an endangered or threatened species. Our regulations (50 CFR 424.12(a)(1)) state that a designation of critical habitat is not prudent when any of the following situations exist:

- (i) The species is threatened by taking or other human activity and identification of critical habitat can be expected to increase the degree of such threat to the species; or
- (ii) Such designation of critical habitat would not be beneficial to the species. In determining whether a designation would not be beneficial, the factors the Services may consider include but are not limited to: Whether the present or threatened destruction, modification, or curtailment of a species' habitat or range is not a threat to the species or whether any areas meet the definition of "critical habitat."

There is currently no imminent threat of collection or vandalism for this species because it is presumed extirpated from the wild, and identification and mapping of critical habitat is not expected to initiate any such threat. In our SSA report and this proposed listing determination for magnificent ramshorn, we have determined that the present or threatened destruction, modification, or curtailment of habitat or range is a threat to magnificent ramshorn. We are able to identify areas that meet the definition of critical habitat. Therefore, because none of the circumstances enumerated in our regulations at 50 CFR 424.12(a)(1) have been identified, we have determined that the designation of critical habitat is prudent for magnificent ramshorn.

## **Critical Habitat Determinability**

Having determined that designation is prudent, under section 4(a)(3) of the Act we must find whether critical habitat for magnificent ramshorn is determinable. Our regulations at 50 CFR 424.12(a)(2) state that critical habitat is not determinable when one or both of the following situations exist:

(i) Data sufficient to perform required analyses are lacking, or

(ii) The biological needs of the species are not sufficiently well known to identify any area that meets the definition of “critical habitat.”

When critical habitat is not determinable, the Act allows the Service an additional year to publish a critical habitat designation (16 U.S.C. 1533(b)(6)(C)(ii)).

We reviewed the available information pertaining to the biological needs of the species and habitat characteristics where the species was historically located. This and other information represent the best scientific data available and led us to conclude that the designation of critical habitat is determinable for magnificent ramshorn.

## **Physical or Biological Features Essential to the Conservation of the Species**

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12(b), in determining which areas we will designate as critical habitat from within the geographical area occupied by the species at the time of listing, we consider the physical or biological features that are essential to the conservation of the species and that may require special management considerations or protection. The regulations at 50 CFR 424.02 define physical or biological features as the features that support the life-history needs of the species, including, but not limited to, water characteristics, soil type, geological features, sites, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles

of conservation biology, such as patch size, distribution distances, and connectivity. For example, physical features essential to the conservation of the species might include gravel of a particular size required for spawning, alkaline soil for seed germination, protective cover for migration, or susceptibility to flooding or fire that maintains necessary early-successional habitat characteristics. Biological features might include prey species, forage grasses, specific kinds or ages of trees for roosting or nesting, symbiotic fungi, or absence of a particular level of nonnative species consistent with conservation needs of the listed species. The features may also be combinations of habitat characteristics and may encompass the relationship between characteristics or the necessary amount of a characteristic essential to support the life history of the species.

In considering whether features are essential to the conservation of the species, we may consider an appropriate quality, quantity, and spatial and temporal arrangement of habitat characteristics in the context of the life-history needs, condition, and status of the species. These characteristics include, but are not limited to, space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing (or development) of offspring; and habitats that are protected from disturbance.

#### *Summary of Essential Physical or Biological Features*

We derive the specific physical or biological features essential to the conservation of magnificent ramshorn from studies of the species' habitat, ecology, and life history as described below. Additional information can be found in the SSA report (Service 2019, entire; available on <https://www.regulations.gov> under Docket No. FWS-R4-ES-2022-0070). We have determined that the physical or biological features essential to the conservation of magnificent ramshorn consist of waterbodies within the species' historical range that:

1. Maintain permanent, lentic flow conditions;
2. Have sufficient littoral depth (approximately 0.5 to 6 feet) to sustain large-leaved emergent aquatic vegetation (e.g., water lilies, spatterdock, etc.);
3. Maintain circumneutral pH (i.e., between pH 6 and 8);
4. Have no salinity (i.e., 0 parts per thousand (ppt) salinity); and
5. Maintain natural water hardness to promote shell growth (greater than 60 parts per million (ppm) calcium carbonate).

### **Criteria Used To Identify Critical Habitat**

#### *Conservation Strategy*

Future viability for magnificent ramshorn depends on maintaining multiple resilient populations over time. While the species is currently likely extirpated from the wild, species experts have identified several strategic efforts that will be important to build the future viability of the species. These could include:

1. Maintain at least two secure captive populations of magnificent ramshorn until such time as there are enough populations in the wild to no longer necessitate such an effort.
2. Reintroduce magnificent ramshorn snails to at least two known historical locations and establish monitoring to ensure reintroductions are successful; augment until populations are established and success criteria are met.
3. Introduce magnificent ramshorn snails to at least two other locations with suitable habitat within the historical range of the species. Monitor to ensure reintroductions are successful; augment until populations are established.

These strategic efforts to promote at least four wild populations (two historical locations occupied and self-sustaining, as well as two other locations within the historical range occupied and self-sustaining), will be more thoroughly addressed in future recovery planning for the species.

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. In accordance with the Act and our implementing regulations at 50 CFR 424.12(b), we review available information pertaining to the habitat requirements of the species and identify specific areas within the geographical area occupied by the species at the time of listing and any specific areas outside the geographical area occupied by the species to be considered for designation as critical habitat. Because the species is likely extirpated in the wild, we have determined that there are no occupied areas to ensure the conservation of the species. Accordingly, we are proposing to designate critical habitat in two unoccupied areas within the historical range for the species. In addition, these unoccupied areas are essential for the conservation of the species. Each of the two unoccupied units contain suitable habitat for the magnificent ramshorn – the ponds contain slow-moving waters, are of sufficient depth to sustain emergent aquatic vegetation, and are managed consistent with magnificent ramshorn’s life requisites. Both ponds were previously occupied by magnificent ramshorn, and we determined the factors that led to the species’ decline in these locations have been ameliorated or are manageable.

To delineate critical habitat units, we used the U.S. Geological Survey’s high resolution National Hydrography Dataset (NHD) to determine the boundaries of each pond. We included all waters from the base of the dams upstream to the upper limits of the pond features that became more stream-like, as demarcated in the NHD data layer. For areas outside the geographic area occupied by the species at the time of listing, we identified the critical habitat units using the following considerations:

- a. Unoccupied habitats have historical records of species occurrence;
- b. Unoccupied areas exhibit suitable habitat availability, providing the physical or biological features necessary for survival, growth, and reproduction of the species;



c. Unoccupied areas provide habitat for reintroduction, with potential to reduce the level of stochastic and human-induced threats, and decrease the risk of extinction because the areas currently contain the essential physical or biological features to support life-history functions of magnificent ramshorn; and

d. Unoccupied habitat currently supports diverse aquatic pond communities, including the presence of closely related species requiring physical or biological features similar to magnificent ramshorn.

When determining proposed critical habitat boundaries, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack the physical or biological features necessary for magnificent ramshorn. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this proposed rule have been excluded by text in the proposed rule and are not proposed for designation as critical habitat. Therefore, if the critical habitat is finalized as proposed, a Federal action involving these lands would not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat.

We have determined that because there are no occupied areas at the time of listing, unoccupied areas are essential for the conservation of the species. Accordingly, we have identified and are proposing two unoccupied units as critical habitat. As detailed in *Conservation Strategy* above, additional units will be needed for recovery, but we cannot currently determine what other areas will have the best chance of successful species introduction. To consider for designation areas not occupied by the species at the time of listing, we must demonstrate that these areas are essential for the conservation of

magnificent ramshorn. Because the species is likely extirpated from the wild, the only way for the species to be conserved and have viable populations in the wild is via captive propagation and reintroduction to unoccupied areas.

Magnificent ramshorn is historically known from four locations, all ponds/impoundments. Of these four historical locations, only two meet all of the criteria for designation as critical habitat. Both Greenfield Lake and McKinzie Pond no longer have suitable habitat for the species, and would require extensive restoration and threat abatement measures before possibly becoming suitable again. Based on our review, we determined that Orton Pond and Big Pond, the two other known historical locations for magnificent ramshorn, have the potential for future reintroduction and reoccupation by the species. Reestablishing viable populations in those two ponds will provide redundancy within the historical range and increase the species' ecological representation. Orton Pond and Big Pond represent habitat within the historical range with the best potential for recovery of the species due to current pond conditions, suitability for reintroductions, compatibility between landowner's existing habitat management and habitat needs of magnificent ramshorn, and landowner interest in recovery and access for monitoring.

Accordingly, we propose to designate two units as critical habitat for magnificent ramshorn. Both units contain the identified physical or biological features, appear to be capable of supporting multiple life-history processes of the species, and are essential for the conservation of the species.

The proposed critical habitat designation is defined by the map or maps, as modified by any accompanying regulatory text, presented at the end of this document under **Proposed Regulation Promulgation**. We include more-detailed information on the boundaries of the proposed critical habitat designation in the preamble of this document. We will make the coordinates or plot points or both on which each map is

based available to the public on <https://www.regulations.gov> at Docket No. FWS-R4-ES-2022-0070 (see **FOR FURTHER INFORMATION CONTACT**) and on the Service’s website at <https://www.fws.gov/office/eastern-north-carolina/library>.

### **Proposed Critical Habitat Designation**

We are proposing to designate approximately 739 acres (ac) (299 hectares (ha)) in two units as critical habitat for magnificent ramshorn. The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for magnificent ramshorn. The two areas we propose as critical habitat are: (1) Orton Pond and (2) Big Pond (Pleasant Oaks Pond). The table below shows the proposed critical habitat units and the approximate area of each unit.

**TABLE 2. Proposed critical habitat units for magnificent ramshorn.**

[Area estimates reflect all land within critical habitat unit boundaries.]

| <b>Critical Habitat Unit</b>     | <b>Land Ownership by Type</b> | <b>Size of Unit in Acres (Hectares)</b> | <b>Occupied?</b> |
|----------------------------------|-------------------------------|---|------------------|
| 1. Orton Pond                    | Private                       | 688 ac (278 ha)                         | No               |
| 2. Big Pond (Pleasant Oaks Pond) | Private                       | 51 ac (21 ha)                           | No               |
| <b>Total</b>                     |                               | <b>739 ac (299 ha)</b>                  |                  |

We present brief descriptions of each unit, and reasons why they meet the definition of critical habitat for magnificent ramshorn, below.

#### *Unit 1: Orton Pond*

Unit 1, Orton Pond, consists of 688 ac (278 ha) of unoccupied lentic habitat in an impounded section of Orton Creek in Brunswick County, North Carolina, approximately ½ mile upstream from its confluence with the Cape Fear River, located east of the town of Boiling Spring Lakes. This pond is privately owned and has a conservation easement along the entire southeastern shore and along the dam right-of-way. Access to Orton

Pond by researchers surveying for magnificent ramshorn has been restricted since the mid-1990s, and the species was last observed in this location in 1995. Orton Pond is one of four known historical locations for the species, and it currently has extensive suitable habitat for the ramshorn, including sluggish flows, sufficient littoral depth for emergent aquatic vegetation, and no salinity. Its management is consistent with magnificent ramshorn's life requisites. For these reasons, we find that the formerly occupied Orton Pond is essential for the conservation of the species.

#### *Unit 2: Big Pond (Pleasant Oaks Pond)*

Unit 2, Big Pond, consists of 51 ac (21 ha) of unoccupied lentic habitat in an impounded section of Sand Hill Creek in Brunswick County, North Carolina, just upstream of the confluence with the Cape Fear River across from Campbell Island. This pond is privately owned and has a conservation easement surrounding the entire pond. The species was last observed in this location in 1994. Big Pond is one of four known historical locations for the species, and it currently has extensive suitable habitat for the ramshorn, including sluggish flows and sufficient littoral depth for emergent aquatic vegetation. Its management is consistent with magnificent ramshorn's life requisites. For these reasons, we find that the formerly occupied Big Pond is essential for the conservation of the species. Because of its proximity to the upstream saltwater wedge in the Cape Fear River, and the potential for dam failure during hurricanes, this pond will require permanent maintenance to prevent effects of saltwater intrusion and the landowner has indicated that maintaining the dam to keep freshwater in the pond is a priority.

### **Effects of Critical Habitat Designation**

#### *Section 7 Consultation*

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the

continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

We published a final rule with a revised definition of destruction or adverse modification on February 11, 2016 (81 FR 7214). (Although we also published a revised definition after that (on August 27, 2019), that 2019 definition was subsequently vacated by the court in *CBD v. Haaland*.) Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, Tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat—and actions on State, Tribal, local, or private lands that are not federally funded, authorized, or carried out by a Federal agency—do not require section 7 consultation.

Compliance with the requirements of section 7(a)(2) is documented through our issuance of:

(1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or

(2) A biological opinion for Federal actions that may affect, and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define “reasonable and prudent alternatives” (at 50 CFR 402.02) as alternative actions identified during consultation that:

(1) Can be implemented in a manner consistent with the intended purpose of the action,

(2) Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction,

(3) Are economically and technologically feasible, and

(4) Would, in the Director’s opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 set forth requirements for Federal agencies to reinstitute formal consultation on previously reviewed actions. These requirements apply when the Federal agency has retained discretionary involvement or control over the action (or the agency’s discretionary involvement or control is authorized by law) and, subsequent to the previous consultation: (a) If the amount or extent of taking specified in

the incidental take statement is exceeded; (b) if new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (c) if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or (d) if a new species is listed or critical habitat designated that may be affected by the identified action.

In such situations, Federal agencies sometimes may need to request reinitiation of consultation with us, but the regulations also specify some exceptions to the requirement to reinitiate consultation on specific land management plans after subsequently listing a new species or designating new critical habitat. See the regulations for a description of those exceptions.

#### *Application of the “Destruction or Adverse Modification” Standard*

The key factor related to the destruction or adverse modification determination is whether implementation of the proposed Federal action directly or indirectly alters the designated critical habitat in a way that appreciably diminishes the value of the critical habitat for the conservation of the listed species. As discussed above, the role of critical habitat is to support physical or biological features essential to the conservation of a listed species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may violate section 7(a)(2) of the Act by destroying or adversely modifying such habitat, or that may be affected by such designation.

Activities that we may, during a consultation under section 7(a)(2) of the Act, find are likely to destroy or adversely modify critical habitat include, but are not limited to:

(1) Actions that would cause physical habitat disturbance. Such activities could include, but are not limited to, draining, dredging, channelization, placement of fill , or

activities that modify or compromise the dam structure such that pond habitat quality is degraded. These activities could eliminate or reduce the habitat necessary for the conservation of these snails.

(2) Actions that would degrade water quality in tributaries or the main pond. Such activities could include, but are not limited to, nonpoint discharges, inputs of dissolved solids or contaminants, erosion, and sedimentation. These activities could eliminate or greatly reduce the habitat necessary for the conservation of these snails.

## **Exemptions**

### *Application of Section 4(a)(3) of the Act*

Section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) provides that the Secretary shall not designate as critical habitat any lands or other geographic areas owned or controlled by the Department of Defense (DoD), or designated for its use, that are subject to an integrated natural resources management plan (INRMP) prepared under section 101 of the Sikes Act Improvement Act of 1997 (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation. There are no DoD lands with a completed INRMP within the proposed critical habitat designation.

### **Consideration of Impacts Under Section 4(b)(2) of the Act**

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. Exclusion decisions are governed by the regulations at 50 C.F.R. 424.19 and the Policy Regarding Implementation of Section 4(b)(2) of the Endangered Species Act, 81 FR 7226 (Feb. 11, 2016) (2016 Policy)—both



of which were developed jointly with the National Marine Fisheries Service (NMFS).

We also refer to a 2008 Department of the Interior Solicitor's opinion entitled "The Secretary's Authority to Exclude Areas from a Critical Habitat Designation under Section 4(b)(2) of the Endangered Species Act" (M-37016). We explain each decision to exclude areas, as well as decisions not to exclude, to demonstrate that the decision is reasonable.

In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise discretion to exclude the area only if such exclusion would not result in the extinction of the species. In making the determination to exclude a particular area, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor. We describe below our process for considering each category of impacts and our analyses of the relevant impacts.

#### *Consideration of Economic Impacts*

Section 4(b)(2) of the Act and its implementing regulations require that we consider the economic impact that may result from a designation of critical habitat. To assess the probable economic impacts of a designation, we must first evaluate specific land uses or activities and projects that may occur in the area of the critical habitat. We then must evaluate the impacts that a specific critical habitat designation may have on restricting or modifying specific land uses or activities for the benefit of the species and its habitat within the areas proposed. We then identify which conservation efforts may be the result of the species being listed under the Act versus those attributed solely to the designation of critical habitat for this particular species. The probable economic impact of a proposed critical habitat designation is analyzed by comparing scenarios both "with

critical habitat” and “without critical habitat.”

The “without critical habitat” scenario represents the baseline for the analysis, which includes the existing regulatory and socio-economic burden imposed on landowners, managers, or other resource users potentially affected by the designation of critical habitat (e.g., under the Federal listing as well as other Federal, State, and local regulations). The baseline, therefore, represents the costs of all efforts attributable to the listing of the species under the Act (i.e., conservation of the species and its habitat incurred regardless of whether critical habitat is designated). The “with critical habitat” scenario describes the incremental impacts associated specifically with the designation of critical habitat for the species. The incremental conservation efforts and associated impacts would not be expected without the designation of critical habitat for the species. In other words, the incremental costs are those attributable solely to the designation of critical habitat, above and beyond the baseline costs. These are the costs we use when evaluating the benefits of inclusion and exclusion of particular areas from the final designation of critical habitat should we choose to conduct a discretionary 4(b)(2) exclusion analysis.

Executive Orders (E.O.s) 12866 and 13563 direct Federal agencies to assess the costs and benefits of available regulatory alternatives in quantitative (to the extent feasible) and qualitative terms. Consistent with the E.O. regulatory analysis requirements, our effects analysis under the Act may take into consideration impacts to both directly and indirectly affected entities, where practicable and reasonable. If sufficient data are available, we assess to the extent practicable the probable impacts to both directly and indirectly affected entities. Section 3(f) of E.O. 12866 identifies four criteria when a regulation is considered a “significant” rulemaking, and requires additional analysis, review, and approval if met. The criterion relevant here is whether the designation of critical habitat may have an economic effect of greater than \$100 million in any given

year (section 3(f)(1)). Therefore, our consideration of economic impacts uses a screening analysis to assess whether a designation of critical habitat for the magnificent ramshorn is likely to exceed the economically significant threshold. For this particular designation, we developed an incremental effects memorandum (IEM) considering the probable incremental economic impacts that may result from this proposed designation of critical habitat. The information contained in our IEM was then used to develop a screening analysis of the probable effects of the designation of critical habitat for magnificent ramshorn (IEc 2020). We began by conducting a screening analysis of the proposed designation of critical habitat in order to focus our analysis on the key factors that are likely to result in incremental economic impacts. The purpose of the screening analysis is to filter out the geographic areas in which the critical habitat designation is unlikely to result in probable incremental economic impacts. In particular, the screening analysis considers baseline costs (i.e., absent critical habitat designation) and includes probable economic impacts where land and water use may be subject to conservation plans, land management plans, best management practices, or regulations that protect the habitat area as a result of the Federal listing status of the species. The screening analysis filters out particular areas of critical habitat that are already subject to such protections and are, therefore, unlikely to incur incremental economic impacts. Ultimately, the screening analysis allows us to focus our analysis on evaluating the specific areas or sectors that may incur probable incremental economic impacts as a result of the designation. This includes assessing whether units are unoccupied by the species and may require additional management or conservation efforts as a result of the critical habitat designation for the species that may incur incremental economic impacts. This screening analysis combined with the information contained in our IEM are what we consider our draft economic analysis (DEA) of the proposed critical habitat designation for magnificent ramshorn; our DEA is summarized in the narrative below.

As part of our screening analysis, we considered the types of economic activities that are likely to occur within the areas likely affected by the critical habitat designation. In our evaluation of the probable incremental economic impacts that may result from the proposed designation of critical habitat for magnificent ramshorn, first we identified, in the IEM dated February 25, 2020, probable incremental economic impacts associated with the following categories of activities: (1) Road maintenance and repair; and (2) dam maintenance. We considered each industry or category individually. Additionally, we considered whether the activities have any Federal involvement. Critical habitat designation generally will not affect activities that do not have any Federal involvement; under the Act, designation of critical habitat only affects activities conducted, funded, permitted, or authorized by Federal agencies. If we list the species and also finalize this proposed critical habitat designation, our consultation would include an evaluation of measures to avoid the destruction or adverse modification of critical habitat.

In our IEM, we attempted to clarify the distinction between the effects that will result from the species being listed and those attributable to the critical habitat designation (i.e., difference between the jeopardy and adverse modification standards) for magnificent ramshorn's critical habitat. Because there are currently no occupied units, all consultations will be addressing adverse modification alone. At such time that the species is reintroduced, and as consultation under the jeopardy standard would focus on the effects of habitat degradation because threats to the species are habitat-related, critical habitat designation would not be expected to result in additional consultation in occupied habitat. This evaluation of the incremental effects has been used as the basis to evaluate the probable incremental economic impacts of this proposed critical habitat designation.

The proposed critical habitat designation for magnificent ramshorn totals approximately 739 ac (299 ha), all of which are currently unoccupied by the species but are essential for the conservation of the species. In these unoccupied areas, any

conservation efforts or associated probable impacts would be considered incremental effects attributed to the critical habitat designation. Within the unoccupied critical habitat, rarely are any actions expected to occur that will result in section 7 consultation or associated project modifications because both of the units are privately owned and subject to conservation easements. Therefore, future activities and associated economic impacts in proposed critical habitat units are anticipated to be limited. Our analysis estimates that cost to private entities is expected to be relatively minor (administrative efforts will cost less than \$8,900 per year, and potential incremental project modifications may cost up to \$12,000 per year).

We are soliciting data and comments from the public on the DEA discussed above, as well as on all aspects of this proposed rule and our required determinations. During the development of a final designation, we will consider the information presented in the DEA and any additional information on economic impacts we receive during the public comment period to determine whether any specific areas should be excluded from the final critical habitat designation under authority of section 4(b)(2), and our implementing regulations at 50 CFR 424.19, and the joint 2016 Policy. We may exclude an area from critical habitat if we determine that the benefits of excluding the area outweigh the benefits of including the area, provided the exclusion will not result in the extinction of this species

#### *Consideration of National Security Impacts*

Section 4(a)(3)(B)(i) of the Act may not cover all DoD lands or areas that pose potential national-security concerns (e.g., a DoD installation that is in the process of revising its INRMP for a newly listed species or a species previously not covered). If a particular area is not covered under section 4(a)(3)(B)(i), then national-security or homeland-security concerns are not a factor in the process of determining what areas meet the definition of “critical habitat.” However, the Service must still consider impacts

on national security, including homeland security, on those lands or areas not covered by section 4(a)(3)(B)(i) because section 4(b)(2) requires the Service to consider those impacts whenever it designates critical habitat. Accordingly, if DoD, Department of Homeland Security (DHS), or another Federal agency has requested exclusion based on an assertion of national-security or homeland-security concerns, or we have otherwise identified national-security or homeland-security impacts from designating particular areas as critical habitat, we generally have reason to consider excluding those areas.

However, we cannot automatically exclude requested areas. When DoD, DHS, or another Federal agency requests exclusion from critical habitat on the basis of national-security or homeland-security impacts, we must conduct an exclusion analysis if the Federal requester provides information, including a reasonably specific justification of an incremental impact on national security that would result from the designation of that specific area as critical habitat. That justification could include demonstration of probable impacts, such as impacts to ongoing border-security patrols and surveillance activities, or a delay in training or facility construction, as a result of compliance with section 7(a)(2) of the Act. If the agency requesting the exclusion does not provide us with a reasonably specific justification, we will contact the agency to recommend that it provide a specific justification or clarification of its concerns relative to the probable incremental impact that could result from the designation. If we conduct an exclusion analysis because the agency provides a reasonably specific justification or because we decide to exercise the discretion to conduct an exclusion analysis, we will defer to the expert judgment of DoD, DHS, or another Federal agency as to: (1) Whether activities on its lands or waters, or its activities on other lands or waters, have national-security or homeland-security implications; (2) the importance of those implications; and (3) the degree to which the cited implications would be adversely affected in the absence of an exclusion. In that circumstance, in conducting a discretionary section 4(b)(2) exclusion analysis, we will

give great weight to national-security and homeland-security concerns in analyzing the benefits of exclusion.

In preparing this proposal, we have determined that the lands within the proposed designation of critical habitat for magnificent ramshorn are not owned or managed by the DoD or DHS, and, therefore, we anticipate no impact on national security or homeland security. However, if through the public comment period we receive information regarding impacts on national security or homeland security from designating particular areas as critical habitat, then as part of developing the final designation of critical habitat, conduct a discretionary exclusion analysis to determine whether to exclude those areas under authority of section 4(b)(2), our implementing regulations at 50 CFR 424.19, and the 2016 Policy.

#### *Consideration of Other Relevant Impacts*

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security discussed above. To identify other relevant impacts that may affect the exclusion analysis, we consider a number of factors, including whether there are permitted conservation plans covering the species in the area—such as HCPs, safe harbor agreements, or CCAAs—or whether there are non-permitted conservation agreements and partnerships that may be impaired by designation of, or exclusion from, critical habitat. In addition, we look at whether Tribal conservation plans or partnerships, Tribal resources, or government-to-government relationships of the United States with Tribal entities may be affected by the designation. We also consider any State, local, social, or other impacts that might occur because of the designation.

We have not identified any areas to consider for exclusion from critical habitat based on other relevant impacts because there are no identified relevant impacts to Tribes, States, local governments, and there are no permitted conservation plans covering

the species. However, during the development of a final designation, we will consider all information currently available or received during the public comment period. If we receive information that we determine indicates that there is a potential for supporting a benefit of excluding any areas, we will undertake an evaluation of that information to determine whether those areas should be excluded from the final critical habitat designation under the authority of section 4(b)(2) of the Act and our implementing regulations at 50 CFR 424.19, as well as the 2016 Policy. If we evaluate information based on a request for an exclusion and we do not exclude, we will fully describe in the final critical habitat determination our rationale for not excluding. We may also exercise the discretion to undertake exclusion analyses for other areas as well, and we will describe all of our exclusion analyses as part of a final critical habitat determination.

*Non-Permitted Conservation Plans, Agreements, or Partnerships*

Shown below is a non-exhaustive list of factors that we consider in evaluating how non-permitted plans or agreements affect the benefits of inclusion or exclusion. These are not required elements of plans or agreements. Rather, they are some of the factors we may consider, and not all of these factors apply to every plan or agreement.

(i) The degree to which the record of the plan, or information provided by proponents of an exclusion, supports a conclusion that a critical habitat designation would impair the realization of the benefits expected from the plan, agreement, or partnership.

(ii) The extent of public participation in the development of the conservation plan.

(iii) The degree to which agency review and required determinations (e.g., State regulatory requirements) have been completed, as necessary and appropriate.

(iv) Whether National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.) reviews or similar reviews occurred, and the nature of any such reviews.

(v) The demonstrated implementation and success of the chosen mechanism.



(vi) The degree to which the plan or agreement provides for the conservation of the physical or biological features that are essential to the conservation of the species.

(vii) Whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan or agreement will be implemented.

(viii) Whether the plan or agreement contains a monitoring program and adaptive management to ensure that the conservation measures are effective and can be modified in the future in response to new information.

At this time, we are not considering excluding any areas within the proposed critical habitat for magnificent ramshorn that are covered by non-permitted plans. We are aware of the conservation partnership of the landowner of Big Pond and a portion of Orton Pond, and the possibility of a commitment to conserve magnificent ramshorn on their property. Therefore, we are requesting information supporting a benefit of excluding any areas from the proposed critical habitat designation. Based on our evaluation of the information we receive, we may determine that we have reason to exclude one or more areas from the final designation.

*Summary of Exclusions Considered Under Section 4(b)(2) of the Act*

In preparing this proposal, we have determined that no HCPs or other management plans for magnificent ramshorn currently exist, and the proposed designation does not include any Tribal lands or trust resources or any lands for which designation would have any economic or national-security impacts. Therefore, we anticipate no impact on Tribal lands, partnerships, or HCPs from this proposed critical habitat designation, and, as described above, we are not considering excluding any particular areas on the basis of the presence of conservation agreements or impacts to trust resources.

During the development of a final designation, we will consider any additional information we receive during the public comment period on this proposed rule regarding

other relevant impacts to determine whether any specific areas should be excluded from the final critical habitat designation under authority of section 4(b)(2) of the Act, and our implementing regulations at 50 CFR 424.19, and the joint 2016 Policy.

## **Required Determinations**

### *Clarity of the Rule*

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (1) Be logically organized;
- (2) Use the active voice to address readers directly;
- (3) Use clear language rather than jargon;
- (4) Be divided into short sections and sentences; and
- (5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in **ADDRESSES**. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

### *Regulatory Planning and Review (Executive Orders 12866 and 13563)*

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget will review all significant rules. OIRA has determined that this proposed rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The Executive order directs agencies to consider regulatory

approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this proposed rule in a manner consistent with these requirements.

*Regulatory Flexibility Act (5 U.S.C. 601 et seq.)*

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA; 5 U.S.C. 801 *et seq.*), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (*i.e.*, small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in

annual business, and agricultural businesses with annual sales less than \$750,000. To determine if potential economic impacts to these small entities are significant, we considered the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result. In general, the term “significant economic impact” is meant to apply to a typical small business firm’s business operations.

Under the RFA, as amended, and as understood in light of recent court decisions, Federal agencies are required to evaluate the potential incremental impacts of rulemaking on those entities directly regulated by the rulemaking itself; in other words, the RFA does not require agencies to evaluate the potential impacts to indirectly regulated entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried out by the agency is not likely to destroy or adversely modify critical habitat. Therefore, under section 7, only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. While only Federal action agencies would be directly regulated if we adopt this proposed critical habitat designation, non-Federal applicants for federal funds or permits may be indirectly impacted because of additional evaluations that may be required during the application process for the federally funded or permitted project, but this is expected to be rare, and minor when it does occur. The RFA does not require evaluation of the potential impacts to entities not directly regulated. Moreover, Federal agencies are not small entities. Therefore, because no small entities would be directly regulated by this rulemaking, the Service certifies that, if made final as proposed, the proposed critical habitat designation will not have a significant economic impact on a substantial number of small entities.

In summary, we have considered whether the proposed designation would result in a significant economic impact on a substantial number of small entities. For the above reasons and based on currently available information, we certify that, if made final, the proposed critical habitat designation will not have a significant economic impact on a substantial number of small business entities. Therefore, an initial regulatory flexibility analysis is not required.

*Energy Supply, Distribution, or Use—Executive Order 13211*

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. In our economic analysis, we did not find that the designation of this proposed critical habitat will significantly affect energy supplies, distribution, or use because the proposed designated ponds are privately owned. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

*Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)*

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*), we make the following finding:

(1) This proposed rule would not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or Tribal governments, or the private sector, and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” These terms are defined in 2 U.S.C. 658(5)–(7). “Federal intergovernmental mandate” includes a regulation that “would impose an enforceable duty upon State, local, or Tribal governments” with two exceptions. It excludes a condition of Federal assistance. It also excludes a duty arising from participation in a voluntary Federal program, unless the regulation relates to a then-existing Federal program under which

\$500,000,000 or more is provided annually to State, local, and Tribal governments under entitlement authority, if the provision would increase the stringency of conditions of assistance or place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding, and the State, local, or Tribal governments "lack authority" to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. "Federal private sector mandate" includes a regulation that would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this proposed rule would significantly or uniquely affect small governments because only private lands are involved in the proposed designation. Therefore, a Small Government Agency Plan is not required.

*Takings—Executive Order 12630*

In accordance with E.O. 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for magnificent ramshorn in a takings implications assessment. The Act does not authorize the Service to regulate private actions on private lands or confiscate private property as a result of critical habitat designation. Designation of critical habitat does not affect land ownership, or establish any closures, or restrictions on use of or access to the designated areas. Furthermore, the designation of critical habitat does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. However, Federal agencies are prohibited from carrying out, funding, or authorizing actions that would destroy or adversely modify critical habitat. A takings implications assessment has been completed for the proposed designation of critical habitat for magnificent ramshorn, and it concludes that, if adopted, this designation of critical habitat does not pose significant takings implications for lands within or affected by the designation.

*Federalism—Executive Order 13132*

In accordance with E.O. 13132 (Federalism), this proposed rule does not have significant Federalism effects. A federalism summary impact statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of this proposed critical habitat designation with, appropriate State resource agencies. From a federalism

perspective, the designation of critical habitat directly affects only the responsibilities of Federal agencies. The Act imposes no other duties with respect to critical habitat, either for States and local governments, or for anyone else. As a result, this proposed rule would not have substantial direct effects either on the States, or on the relationship between the national government and the States, or on the distribution of powers and responsibilities among the various levels of government. However, it may assist State and local governments in long-range planning because they no longer have to wait for case-by-case section 7 consultations to occur.

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) of the Act would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

*Civil Justice Reform—Executive Order 12988*

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the proposed rule does not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, this proposed rule identifies the elements of the physical or biological features essential to the conservation of the species. The proposed areas of designated critical habitat are presented on maps, and the proposed rule provides several options for the interested public to obtain more detailed location information, if desired.

*Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)*



This proposed rule does not contain information collection requirements, and a submission to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*) is not required. We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number.

*National Environmental Policy Act (42 U.S.C. 4321 et seq.)*

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the *Federal Register* on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).

*Government-to-Government Relationship with Tribes*

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with Tribes in developing programs for healthy ecosystems, to acknowledge that Tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to Tribes. We have determined that no

Tribal lands fall within the boundaries of the proposed critical habitat for magnificent ramshorn, so no Tribal lands would be affected by the proposed designation.

## **References Cited**

A complete list of references cited in this rulemaking is available on the internet at <https://www.regulations.gov> and upon request from the Raleigh Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

## **Authors**

The primary authors of this proposed rule are the staff members of the Fish and Wildlife Service's Species Assessment Team and the Raleigh Ecological Services Field Office.

## **List of Subjects in 50 CFR Part 17**

Endangered and threatened species, Exports, Imports, Plants, Reporting and recordkeeping requirements, Transportation, Wildlife.

## **Proposed Regulation Promulgation**

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

### **PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS**

1. The authority citation for part 17 continues to read as follows:

AUTHORITY: 16 U.S.C. 1361-1407; 1531-1544; and 4201-4245, unless otherwise noted.

2. Amend § 17.11, in paragraph (h), by adding an entry for “Ramshorn, magnificent” to the List of Endangered and Threatened Wildlife in alphabetical order under SNAILS to read as follows:

#### **§ 17.11 Endangered and threatened wildlife.**

\* \* \* \* \*

(h) \* \* \*

| Common name           | Scientific name              | Where listed   | Status | Listing citations and applicable rules   |
|-----------------------|------------------------------|----------------|--------|--|
| * * * * *             |                              |                |        |  |
| SNAILS                |                              |                |        |  |
| * * * * *             |                              |                |        |  |
| Ramshorn, magnificent | <i>Planorbella magnifica</i> | Wherever found | E      | [ <i>Federal Register</i> citation when published as a final rule]; 50 CFR 17.95(f). <sup>CH</sup> |
| * * * * *             |                              |                |        |  |

3. Amend § 17.95, in paragraph (f), by adding an entry for “Magnificent Ramshorn (*Planorbella magnifica*)” immediately following the entry for “Rough Hornsnail (*Pleurocera foremani*)” to read as follows:

**§ 17.95 Critical habitat—fish and wildlife.**

\* \* \* \* \*

(f) \* \* \*

\* \* \* \* \*

Magnificent Ramshorn (*Planorbella magnifica*)

(1) Critical habitat units are depicted for Brunswick County, North Carolina, on the map in this entry.

(2) Critical habitat does not include humanmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on the effective date of this rule.

(3) Data layers defining map units were created in a Geographic Information System (GIS), and critical habitat units were mapped using the U.S. Geological Survey’s National Hydrography Dataset. The map in this entry, as modified by any accompanying regulatory text, establishes the boundaries of the critical habitat designation. The coordinates or plot points or both on which the map is based are available to the public at <https://www.regulations.gov> at Docket No. FWS-R4-ES-2022-0070, and at the field office responsible for this designation. You may obtain field office location information

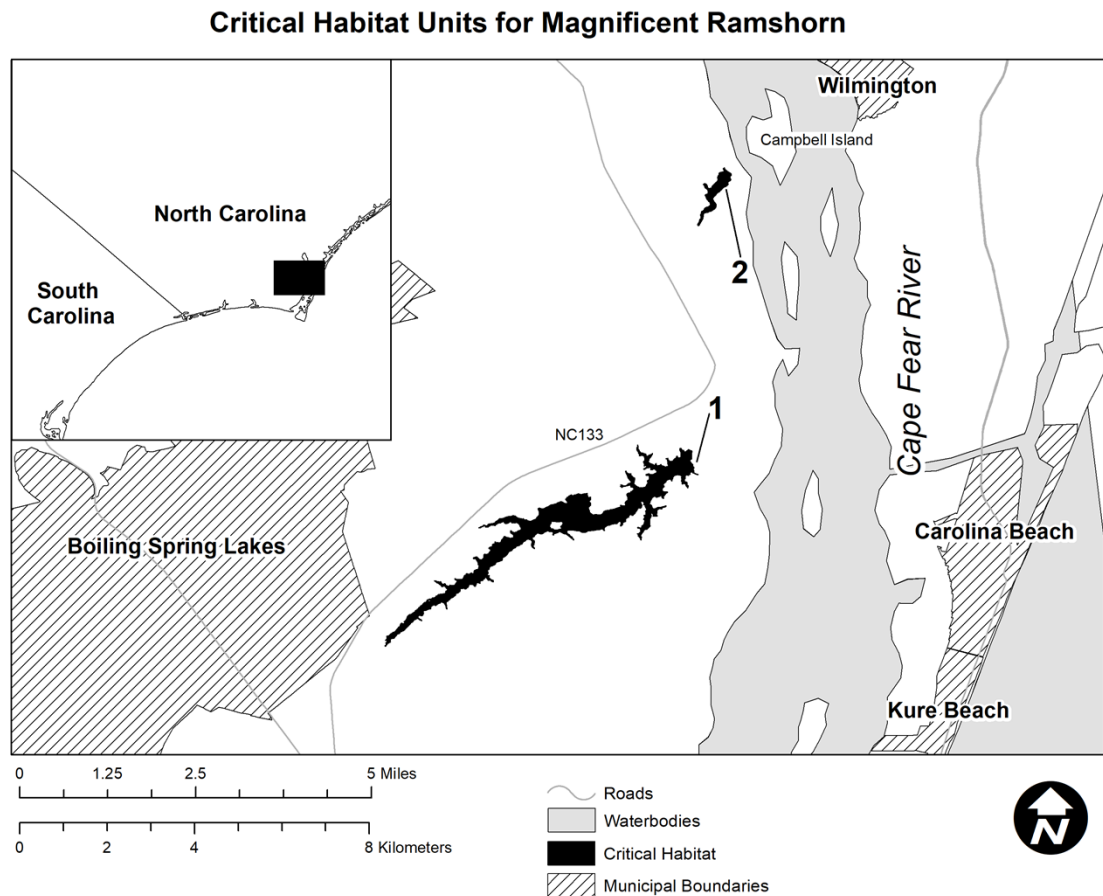
by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(4) Unit 1: Orton Pond, Brunswick County, North Carolina.

(i) Unit 1 consists of 688 acres (ac) (278 hectares (ha)) in an impounded section of Orton Creek in Brunswick County, North Carolina, approximately ½ mile upstream from the confluence with the Cape Fear River and east of the town of Boiling Spring Lakes. Unit 1 is composed of lands in private ownership.

(ii) Map of Units 1 and 2 follows:

**Figure 1 for Magnificent Ramshorn (*Planorbella magnifica*) paragraph (4)(ii)**



(5) Unit 2: Big Pond (Pleasant Oaks Pond), Brunswick County, North Carolina.

(i) Unit 2 consists of 51 ac (21 ha) in an impounded section of Sand Hill Creek in Brunswick County, North Carolina, near the confluence with the Cape Fear River across from Campbell Island. Unit 2 is composed of lands in private ownership.

(ii) Map of Unit 2 is provided at paragraph (4)(ii) of this entry.

\* \* \* \* \*

**Martha Williams,**

*Director,*

*U.S. Fish and Wildlife Service.*

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